

**Hanks Balanced Salts Solution (HBSS) 10X**  
w/ Calcium w/ Magnesium w/o Sodium Bicarbonate w/ Phenol Red

**CAT N° :** X0509

**Theoretical pH :**  $5.8 \pm 0.5$

**Osmolality :** >1600 mOsm/kg

**Colour :** Red - orange

**Storage conditions :** Room temperature

**Shelf life :** 48 months

**Sterility tests :**

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Endotoxin :** <1 EU/ml

**Composition :** Displayed on website; also available on request

**Recommended use :**

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

The product is intended to be used *in vitro*, in laboratory only. Do not use it in therapy, human or veterinary applications.

**Application :**

Hanks' Balanced Salt Solution (HBSS) is intended for use in the maintenance of mammalian cells where a chemically defined, balanced salt solution provides an environment that will maintain the structural and physiological integrity of cells *in vitro*.

In summary, the roles of a balanced salt solution are :

- maintenance of intra and extra cellular osmotic balanced
- provision of water and inorganic ions essential for cells metabolism
- provision of energy for cells metabolism thanks to glucose
- buffer effect to maintain the environment in physiological conditions of pH (7.2 – 7.6)

Hanks' salts are designed for maintenance of cells in ambient (non CO<sub>2</sub>) atmospheric conditions.

**Use :**

Use this medium diluted at 1 :10 with cell culture grade water.

After dilution and before use, add 0.35 g of sodium bicarbonate (CAT N°: P2060) per litre of solution or 4.7 ml of a sodium bicarbonate solution at 7.5% (CAT N°: L0680) per litre of solution.

Supplements, such as antibiotics or sodium bicarbonate, should be added as sterile supplements to the medium. Storage conditions and shelf-life of supplemented products will be affected by the nature of the supplements.

**Indications of deterioration :**

Solution should be clear and free of particulate and flocculent material.

Do not use if solution is cloudy or contains precipitate.

Other evidence of deterioration may include colour change or degradation of physical or performance characteristics of the solution.